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## (54) TRANSPARENT HOLOGRAM RECORDING MATERIAL

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To obtain a transparent hologram recording material which has high sensitivity to visible rays or electron beams, excellent hologram characteristics and especially which is colorless and excellent in transparency by using each specified material for a photopolymn. initiator, a sensitizer and an assistant.

**SOLUTION:** This hologram recording material consists of the following compds. Namely, the compds. are cation polymerizable thermosetting epoxy oligomers soluble in a solvent and having at least one glycidyl group in the unit structure, a compd. which is a liquid at normal temp. and normal pressure and has  $\geq 100^{\circ}\text{C}$  boiling temp. at normal pressure and at least one radical polymerizable ethylenic unsatd. bond. an aromatic onium salt which produces radicals to activate radical polymn. and which produces Bronsted acid or Lewis acid to activate cation polymn. when exposed to actinic radiation and moreover, a compd. selected from among 3-substd. coumarin compds. and p-amino unsatd. ketone compds. as a sensitizing dye. The recording material contains a quaternary boron salt as an assistant.

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